ANL ITAPS project

Goals

The ITAPS center is a collaboration between several universities and DOE laboratories, and is funded by the DOE SciDAC program. The primary objective of ITAPS is to develop technologies that enable application scientists to easily use multiple mesh and discretization strategies within a single simulation on petascale computers. This is accomplished through the development of common functional interfaces to geometry, mesh, and other simulation data. This web site describes ANL?s implementation of these interfaces.

Interfaces:

ITAPS is developing interface specifications for geometry (iGeom), mesh (iMesh), and relations (iRel), which are used to access various data used in petascale applications.

Implementations & Downloads:

ANL is working on implementations of the ITAPS interfaces. iGeom and iMesh are implemented in the CGMA and MOAB packages, respectively. iRel is implemented in the newer Lasso component.

The ITAPS interfaces may be accessed via Python with PyTAPS. For information on how to build/install PyTAPS with MOAB, CGM, and Lasso, consult the Installing PyTAPS page.

Services & Applications:

ANL's ITAPS interface implementations and the components they rely on have been used to implement various services and applications, including Mesquite, DDRIV, MBZoltan, Camel, and partGeom.

For more information on ANL's ITAPS work, contact Tim Tautges, tautges _at_ mcs.anl.gov.

Active Issues

A number of issues are being discussed actively right now (for a complete set of issues, see Active Tickets):

- C-bindings for ITAPS interfaces
- iRel interface

For the original Trac instructions, see TracInstructions..